

Notice of Allowability

Application No.

10/723,557

Examiner

Richard M. Lorence

Applicant(s)

INOUE ET AL.

Art Unit

3681

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment received on 14 March 2005.
2. ☒ The allowed claim(s) is/are 1-10.
3. ☒ The drawings filed on 24 November 2003 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

REASONS FOR ALLOWANCE

The amendment filed on March 14, 2005 has been entered. Claims 1, 5 and 7-10 have been amended.

Claims 1-10 are allowed.

The following is an examiner's statement of reasons for allowance:

None of the prior art of record shows or suggests a magnet type clutch device comprising the combination of a magnet coupling and an electromagnetic clutch, wherein the electromagnetic clutch includes a magnetizing coil arranged within a clutch rotor fixed to an input shaft, and the magnet coupling and the magnet coupling has a permanent magnet rotating body rotatably supported by an output shaft, an armature held by the rotating body so as to be moved forward and backward, a disk fixed to the output shaft, and a conductor or a hysteresis material attached to the disk so as to be opposed to a permanent magnet mounted to the rotating body with a slight gap therebetween, wherein the permanent magnet mounted to the permanent magnet rotating body has multiple poles in a circumferential direction, and magnetic loop elements alternately assembled in the circumferential direction on inner and outer circumferential sides of each of S and N poles as recited in claim 1, and particularly wherein rotation speed of the disk can be changed by switching and controlling the direction of a magnetic flux of the electromagnetic clutch.


Nor does the prior art of record shows or suggests a magnet type fan clutch device comprising the combination of a magnet coupling and an electromagnetic clutch, and having a fan attached to the magnet coupling side, wherein the electromagnetic clutch includes a magnetizing coil arranged within a clutch rotor rotatably supported by a fixing shaft, and a magnetizing coil arranged within the rotor, and the magnet coupling has a permanent magnet rotating body rotatably supported by the fixing shaft, an armature held by the rotating body so as to be moved forward and backward, a disk with the fan rotatably supported by the rotating body, and a conductor or a hysteresis material attached to the disk so as to be opposed to a permanent magnet mounted to the permanent magnet rotating body with a slight gap therebetween, wherein the permanent magnet rotating body has multiple poles in a circumferential direction, and magnetic loop elements alternately assembled in the circumferential direction on inner and outer circumferential sides of each of S and N poles as recited in claim 5, and particularly wherein rotation speed of the disk can be changed by switching and controlling the direction of a magnetic flux of the electromagnetic clutch.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard M. Lorence whose telephone number is (571) 272-7094. The examiner can normally be reached on Mondays through Fridays from 9:00AM to 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles A. Marmor can be reached on (571) 272-7095. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Richard M. Lorence
Primary Examiner
Art Unit 3681

Lorence/rml